A PRELIMINARY SYNOPSIS OF THE DRAGONFLIES OF NEVADA

BY IRA LA RIVERS

Reno, Nevada

Although Nevada is an area of almost extreme semi-aridity, still the as yet insignificant number of dragonfly captures within its boundaries have, to the best of my knowledge, yielded the rather substantial number of 63 species. This number is considered substantial because dragonflies are, as a group, restricted in their distribution in direct proportion to the available water supply, and Nevada's water supply probably averages less per unit mile than any other region of equal size in the United States. Only a very small portion of the vast reaches of the state has been collected over, much still remaining to be done along the Nevada-California border, where the western edge of the state meets the tall, humid Sierra, and where, no doubt, many species hitherto accredited only to the coast region will eventually be found crossing the line. A similar situation exists along the Nevada-Idaho and Nevada-Oregon borders, where numerous swift streams head on one of the Great Basin's northern divides, and flow north and west to the Pacific Ocean via the Snake and Columbia rivers. There is less to be expected along the Nevada-Utah line, since the boundary here is man-made, and stretches across salt flats, playas, and typical desert topographies which present much the same aspect, and contain much the same ecologic environments, in one state as in the other. The third portion of the state with considerable promise for future collecting is the southern tip, bordered on the south and east by the turbulent Rio Colorado, up whose broad waters many subtropical dragonflies have worked their way northward from Arizona, California, and Mexico. And last, but not least, is the fourth region of promise, the interior, higher Great Basin ranges such as those in central Nevada bearing the Nevada National Forest.

It is the purpose of the author to enlarge upon this list from time to time, as future collecting turns up additional species, until such a time as the accumulation of seasonal and biologic data is sufficient to warrant a more comprehensive synopsis of the state's dragonflies.

Order ODONATA "Recent Dragonflies"

Superfamily LIBELLULOIDEA "Dragonflies proper"

Family ÆSHNIDÆ "Darners"

Subfamily Petalurinæ "Grays"

1. Tanypteryx hageni (Selys), "Western Grayling"—Washoe County (Cody Basin). Previous records: Muttkowski, 1910 ("Nevada"); Kennedy, 1917 ("Nev., Reno").

Subfamily Gomphinæ "Clubtails"

- 2. Ophiogomphus occidentis Hagen, "Western Grayclub"— Washoe County (Cody Basin). Previous records: No specific designations; Muttkowski, 1910 ("Canadian: British Columbia, Washington, Utah"); Essig, 1926 ("British Columbia, Washington, Oregon, California, Utah").
- 3. Ophiogomphus montanus (Selys), "Montana Grayclub"— *Elko County* (Gold Creek, Mountain City, Owyhee, Wild Horse Reservoir). Previous records: None.
- 4. Ophiogomphus morrisoni Selys, "Morrison Grayclub"—Elko County (Carlin, Elko); Eureka County (Beowawe, Palisade); Humboldt County (Winnemucca); Pershing County (Rye Patch Reservoir); Washoe County (Truckee Meadows, Wadsworth). Previous records: Muttkowski, 1910 ("Nevada, California"); Kennedy, 1917 ("Reno, Lower Truckee River, Carlin, Golconda"); Essig, 1926 ("Washington, Oregon, California, Nevada").
- 5. Ophiogomphus bison Selys, "Bison Grayclub"—not seen. Previous records: No specific designations; Muttkowski, 1910 ("Lower Sonoran: California, Nevada").
- 6. Herpetogomphus designatus Hagen, "Common Redclub"— *Lincoln County* (Pahranagat Valley). Previous records: None.
- 7. Herpetogomphus compositus Hagen, "Western Redclub"—not seen. Previous records: Muttkowski, 1910 ("Oregon and Wyoming to Arizona and Texas, California"); Kennedy, 1917 ("Lower Truckee River, Carlin, Lovelock"); Essig, 1926 ("Oregon, California, Nevada, Wyoming, Arizona").

- 8. Gomphus intricatus Hagen, "Intricate Clubtail"—Pershing County (Rye Patch Reservoir). Previous records: Kennedy, 1917 ("Golconda, Lovelock").
- 9. Gomphus olivaceus Selys, "Olivaceous Clubtail"—Pershing County (Lovelock). Previous records: Kennedy, 1917 ("Golconda, Winnemucca, Lovelock").

Subfamily ÆSHNINÆ "Darners proper"

- 10. Anax junius (Drury), "Common Zilia"—Churchill County (Carson Sink); Clark County (Boulder Lake, Rio Colorado); Elko County (Carlin, Elko); Eureka County (Beowawe, Palisade); Humboldt County (Golconda, Paradise, Winnemucca); Lander County (Battle Mountain); Lincoln County (Caliente, Pahranagat Valley, Panaca, Pony Spring); Lyon County (Smith Valley, Yerington); Mineral County (Schurz); Pershing County (Imlay, Lovelock, Mill City, Rye Patch Reservoir); Washoe County (Truckee Meadows, Wadsworth, Washoe Lake). Previous records: Muttkowski, 1910 ("Entire North America"); Kennedy, 1917 ("Golconda").
- 11. Æshna californica (Calvert), The "California Blue"— Washoe County (Cody Basin, Truckee Meadows). Previous records: Muttkowski, 1910 ("Upper and Lower Sonoran: British Columbia and California to Utah and Arizona").
- 12. Æshna multicolor Hagen, the "Desert Blue"—Clark County (Boulder Lake, Corn Creek, Harris Spring, Las Vegas, Rio Colorado); Elko County (Carlin); Eureka County (Palisade); Pershing County (Rye Patch Reservoir); Humboldt County (Paradise); Lincoln County (Caliente, Pahranagat Valley, Panaca); Washoe County (Truckee Meadows); White Pine County (Lehman Caves). Previous records: Muttkowski, 1910 ("Upper and Lower Sonoran: British Columbia to Texas, Colorado and Panama"); Kennedy, 1917 ("Lower Truckee River, Golconda, Winnemucca").
- 13. Æshna umbrosa Walker, the "Woodland Blue"—Elko County (Gold Creek, Jarbridge, Mountain City, Owyhee, Whiterock). Previous records: Muttkowski, 1910 ("Canadian to Upper Austral: Atlantic to Pacific Coast").

- 14. Æshna palmata Hagen, the "Palma Blue"—none seen. Previous records: Muttkowski, 1910 ("Boreal: Pacific Coast, Kamchatka, Alaska to Colorado, Utah, B. Cal."); Kennedy, 1917 ("Reno, Carlin, Golconda").
- 15. Æshna constricta Say, the "Common Blue"—Pershing County (Rye Patch Reservoir); Washoe County (Truckee Meadows, Wadsworth). Previous records: Kennedy, 1917 ("Golconda").
- 16. Æshna interrupta Walker, the "Elusive Blue"—not seen. Previous records: Kennedy, 1917 ("Golconda").

Subfamily Cordulegasterinæ "Biddies"

17. Cordulegaster dorsalis Hagen, "Western Biddy"—Washoe County (Cody Basin, Peavine, Verdi). Previous records: None.

Family LIBELLULIDÆ "Skimmers"

Subfamily Macrominæ "Belted Skimmers"

- 18. Macromia pacifica Hagen, "Western Waba"—Washoe County (Cody Basin). Previous records: No specific designations; Muttkowski, 1910 ("Upper Austral: Wisconsin to Indiana, Texas, California").
- 19. Macromia magnifica McLachlan, "Desert Waba"—Elko County (Carlin); Eureka County (Dunphy); Humboldt County (Mouth of Little Humboldt River); Lincoln County (Pahranagat Valley); Pershing County (Lovelock, Mill City, Rye Patch Reservoir); Washoe County (Wadsworth). Previous records: Kennedy, 1917 ("Lower Truckee River, Golconda, Winnemucca").

Subfamily Libellulinæ "Skimmers Proper"

20. Libellula saturata Uhler, "Red Skimmer"—Clark County (Boulder Lake, Corn Creek, Harris Spring, Las Vegas, Rio Colorado, Stump Springs); Elko County (Gold Creek); Eureka County (Beowawe); Lincoln County (Caliente, Pahranagat Valley, Pony Springs). Previous records: No specific designations; Muttkowski, 1910 ("Upper and Lower Sonoran: Montana and New Mexico to Baja California and Mexico") Essig, 1926 ("Montana, Colorado, Utah, California, Arizona, New Mexico").

- 21. Libellula forensis Hagen, the "Eight Spot"—Elko County (Carlin, Elko, Deeth); Eureka County (Beowawe, Dunphy, Palisade); Humboldt County (Golconda, Mouth of Little Humboldt River, Paradise, Valmy, Winnemucca); Lander County (Battle Mountain); Pershing County (Lovelock, Humboldt, Imlay, Mill City, Oreana, Rye Patch Reservoir); Lincoln County (Pahranagat Valley); Washoe County (Truckee Meadows, Washoe Valley). Previous records: Muttkowski, 1910 ("Upper Sonoran: British Columbia to California, Montana to Arizona"); Kennedy, 1917 ("Reno, Carlin, Golconda").
- 22. Libellula quadrimaculata Linné, "Cosmopolite Skimmer"— Washoe County (Cody Basin, Verdi). Previous records: No specific designations; Essig, 1926 ("Northern Hemisphere, excepting the tropics. Throughout our western area").
- 23. Libellula nodisticta Hagen, the "Four Spot"—Elko County (Elko); Lincoln County (Pahranagat Valley); Pershing County (Rye Patch Reservoir). Previous records: Muttkowski, 1910 ("Upper Sonoran: Montana and Washington to California and Nevada; Mexico to Venez."); Kennedy, 1917 ("Golconda").
- 24. Libellula composita Hagen, "White Eyes"—Churchill County (Carson Sink, Stillwater); Lincoln County (Pahranagat Valley); Pershing County (Rye Patch Reservoir). Previous records: Kennedy, 1917 ("Lovelock").
- 25. Plathemis subornata Hagen, "Desert Whitetail"—Churchill County (Carson Sink); Elko County (Carlin); Lincoln County (Pahranagat Valley); Pershing County (Rye Patch Reservoir). Previous records: Kennedy, 1917 ("Golconda").
- 26. Sympetrum corruptum (Hagen), "Common Toper"—
 Churchill County (Carson Sink, Fallon); Clark County
 (Boulder Lake, Corn Creek, Harris Springs, Hidden Canon,
 Las Vegas, Lee Canon, Overton, Rio Colorado, Stump
 Springs); Douglas County (Gardnerville, Topaz Lake);
 Elko County (Carlin, Deep Creek, Elko, Gold Creek, Jarbridge, Midas, Mountain City, North Fork, Owyhee);
 Esmeralda County (Fish Lake Valley); Eureka County
 (Beowawe, Dunphy, Palisade); Humboldt County (Golconda, Paradise, Winnemucca); Lander County (Battle

- Mountain); Lincoln County (Caliente, Pahranagat Valley, Panaca, Pony Springs, Quartz Spring); Lyon County (Fernley, Smith Valley, Yerington); Mineral County (Schurz); Nye County (Beatty); Ormsby County (Carson City); Pershing County (Lovelock, Humboldt, Imlay, Mill City, Oreana, Rye Patch Reservoir); Storey County (Virginia City); Washoe County (Dry Lake, Peavine, Pyramid Lake, Truckee Meadows, Verdi, Wadsworth, Washoe Lake); White Pine County (Duck Creek, Ely, Timber Creek). Previous records: Muttkowski, 1910 ("Transition and Upper Austral: New York to Tennessee and Louisiana; Texas to Honduras, north to British Columbia; Asia; Sea of Ocholsk"); Kennedy, 1917 ("Reno, Lower Truckee River, Pyramid Lake, Carlin, Golconda").
- 27. Sympetrum illotum (Hagen), "Pacific Toper"—Washoe County (Truckee Meadows). Previous records: No specific designations; Muttkowski, 1910 ("Transition and Upper Sonoran: Pacific Coast, British Columbia to California, Nevada").
- 28. Sympetrum madidum (Hagen), "Western Toper"—not seen. Previous records: Muttkowski, 1910 ("Upper Sonoran: British Columbia to California; Montana, Wyoming, Colorado"); Kennedy, 1917 ("Carlin").
- 29. Sympetrum pallipes (Hagen), the "Palip Toper"—Churchill County (Carson Sink); Elko County (Carlin, Elko, Mountain City); Humboldt County (Mouth of Little Humboldt River, Valmy, Winnemucca); Pershing County (Rye Patch Reservoir); Washoe County (Truckee Meadows). Previous records: Kennedy, 1917 ("Reno, Lower Truckee River, Carlin, Golconda").
- 30. Sympetrum rubicundulum (Say), "Rubic Toper"—Elko County (Carlin, Mountain City, North Fork); Pershing County (Rye Patch Reservoir); Washoe County (Dry Lake, Truckee Meadows). Previous records: Kennedy, 1917 ("Reno, Carlin").
- 31. Sympetrum semicinctum (Say), the "Red Toper"—Churchill County (Carson Sink); Elko County (Carlin, Elko); Humboldt County (Winnemucca); Pershing County (Lovelock);

- Washoe County (Wadsworth, Derby). Previous records: Kennedy, 1917 ("Lower Truckee River, Golconda").
- 32. Sympetrum costiferum (Hagen), "Blacktail"—Elko County (Carlin); Pershing County (Rye Patch Reservoir); Washoe County (Truckee Meadows, Wadsworth). Previous records: Kennedy, 1917 ("Reno, Golconda, Lovelock").
- 33. Sympetrum danæ (Sulzer), the "Dana Toper"—Elko County (Mountain City); Pershing County (Rye Patch Reservoir); Washoe County (Truckee Meadows). Previous records: Kennedy, 1917, as S. scoticum (Donovan) ("Reno").
- 34. Sympetrum atripes (Hagen), the "Elusive Toper"—Washoe County (Truckee Meadows). Previous records: None.
- 35. Leucorrhinia glacialis Hagen, "Jimmy Whiteface"—not seen. Previous records: Hagen, 1890 ("Reno").
- 36. Leucorrhinia intacta (Hagen), "Johnny Whiteface"—not seen. Previous records: No specific designations; Essig, 1926 ("British Columbia, Washington, Oregon, Nevada").
- 37. Pachydiplax longipennis (Burmeister), the "Blue Pirate"—
 Clark County (Las Vegas); Lincoln County (Pahranagat
 Valley); Washoe County (Truckee Meadows, Washoe Lake).
 Previous records: Muttkowski, 1910 ("Austral to Gulf Strip:
 entire United States").
- 38. Erythemis simplicicollis (Say), "Green Jacket"—Clark County (Las Vegas); Lincoln County (Pahranagat Valley); Pershing County (Mill City, Rye Patch Reservoir); Washoe County (Truckee Meadows, Washoe Valley). Previous records: Muttkowski, 1910 ("United States; Ontario to British Columbia to California; Montana to Texas, Mexico"); Kennedy, 1917 ("Golconda, Lovelock").
- 39. Pantala hymenea (Say), the "Two Spot"—Clark County (Boulder Lake, Las Vegas, Rio Colorado, Stump Springs); Lincoln County (Caliente, Pahranagat Valley, Quartz Spring). Previous records: None.
- 40. Pantala flavescens (Fabricius), the "Globe Skimmer"— Washoe County (Cody Basin). Previous records: No specific designations; Muttkowski, 1910 ("Cosmopolitan (circumequatorial); all continents, except Europe (Italy); North America: Alleghanian to Tropic; Maine and North Dakota to California and Florida").

- 41. Trapezostigma lacerata Hagen, the "Common Master"—
 Clark County (Las Vegas, Searchlight); Lincoln County
 (Caliente, Pahranagat Valley, Panaca). Previous records:
 No specific designations; Muttkowski, 1910 ("Carolinian
 to Austroriparian: New York to South Dakota to California
 and Florida").
- 42. Trapezostigma onusta Hagen, the "Brown Master"—Washoe County (Pyramid Lake). Previous records: No specific designations; Muttkowski, 1910 ("Carolinian to Tropic: Ohio and Illinois to California and Florida").

Superfamily Agrionoidea "Damselflies"

Family ACRIONIDÆ "Janies"

Subfamily Agrioninæ "Janies proper"

- 43. Agrion æquabile (Say), "Western Blackwing"—Elko County (Mountain City). Previous records: None.
- 44. Hetærina americana (Fabricius), "Common Rubywings"—
 Clark County (Boulder Lake, Rio Colorado); Lincoln
 County (Caliente, Pahranagat Valley). Previous records: No
 specific designations; Muttkowski, 1910 ("Canadian to
 Lower Austral: Canada to Guatemala").

Family CŒNAGRIONIDÆ "Brocatels"

Subfamily Lestinæ "Gimps"

- 45. Lestes congener Hagen, "Common Gimp"—Churchill County (Carson Sink); Elko County (Carlin, Elko); Eureka County (Beowawe, Palisade); Humboldt County (Mouth of Little Humboldt River, Winnemucca); Pershing County (Lovelock, Mill City, Rye Patch Reservoir); Washoe County (Truckee Meadows, Wadsworth). Previous records: Kennedy, 1917 ("Reno, Lower Truckee River, Carlin, Golconda, Winnemucca"); Essig, 1926 ("A common species throughout the United States, and widely distributed in the west").
- 46. Lestes unguiculatus Hagen, "Pond Gimp"—Pershing County (Lovelock, Oreana, Rye Patch Reservoir); Washoe County (Dry Lake, Truckee Meadows, Wadsworth). Previous records: Kennedy, 1917 ("Golconda").

47. Lestes uncatus Kirby, "American Gimp"—Churchill County (Rye Patch Reservoir); Lyon County (Fernley); Washoe County (Dry Lake, Truckee Meadows, Wadsworth). Previous records: Muttkowski, 1910 ("Canadian and Transition into Upper Austral: Nova Scotia and Panama to California and British Columbia"); Kennedy, 1917 ("Reno).

Subfamily Conagrionidæ "Willowisps"

- 48. Argia agrioides Calvert, "Desert Wamble"—Clark County (Las Vegas, Stump Springs). Previous records: None.
- 49. Argia alberta Kennedy, "Alba Wamble"—Elko County (Peck Hot Springs, near Mountain City); Washoe County (Steamboat Hot Springs). Previous records: No specific designations; Needham and Heywood, 1929 ("California, Colorado and Utah").
- 50. Argia rita Kennedy, "Rita Wamble"—Clark County (Las Vegas, Stump Springs). Previous records: None.
- 51. Argia emma Kennedy, "Emma Wamble"—Churchill County (Carson Sink); Elko County (Carlin, Elko, Mountain City, Owyhee); Humboldt County (Winnemucca); Lander County (Battle Mountain); Pershing County (Rye Patch Reservoir); Washoe County (Truckee Meadows, Wadsworth, Washoe Lake). Previous records: Kennedy, 1917 ("Reno, Lower Truckee River, Carlin, Golconda, Winnemucca").
- 52. Argia vivida Hagen, "Western Wamble"—Clark County (Las Vegas); Elko County (Peck Hot Spring near Mountain City). Previous records: No specific designations; Essig, 1926 ("Common about perennial streams throughout the entire western area, the United States and Canada"); Needham and Heywood, 1929 ("British Columbia and Montana to Texas and California").
- 53. Amphiagrion saucium (Burmeister), "Common Whiffet"—
 Elko County (Elko, Mountain City); Humboldt County
 (Mouth of Little Humboldt River); Pershing County (Rye
 Patch Reservoir); Washoe County (Truckee Meadows).
 Previous records: Muttkowski, 1910 ("Austral, into Transition: Washington and California to Massachusetts and South
 Carolina, Cuba?"); Kennedy, 1917 ("Reno").
- 54. Telebasis salva (Hagen), "Desert Alva"—Clark County (Stump Springs). Previous records: No specific designations; Essig, 1926 ("California, Nevada, Arizona").

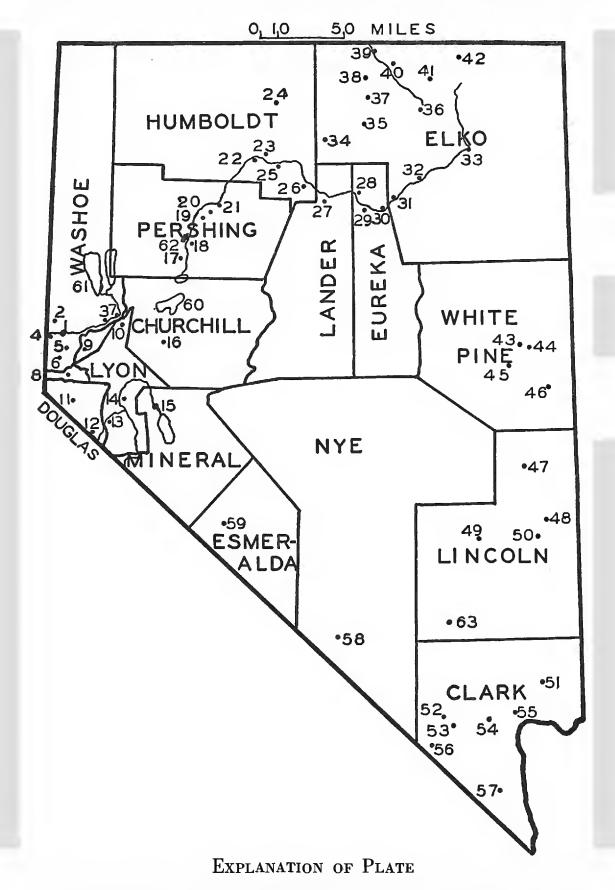
- 55. Enallagma boreale Selys, the "Boreal Bluet"—Clark County (Harris Springs, Kyle Canon); Elko County (Mountain City); Washoe County (Truckee Meadows). Previous records: Muttkowski, 1910 ("Hudsonian, Boreal and Transition: Alaska and Washington to Nevada to Maine"); Kennedy, 1917 ("Golconda") as E. calverti Morse.
- 56. Enallagma clausum Morse, "Mountain Bluet"—Not seen. Previous records: Morse, 1895 ("Franktown"); Kennedy, 1917 ("Pyramid Lake, Golconda").
- 57. Enallagma carunculatum Morse, "Lake Bluet"—Churchill County (Carson Sink); Elko County (Carlin, Elko); Humboldt County (Golconda, Winnemucca); Pershing County (Imlay, Lovelock, Rye Patch Reservoir); Washoe County (Truckee Meadows, Derby). Previous records: Muttkowski, 1910 ("Canadian and Alleghanian: British Columbia and Nevada to New York and Pennsylvania"); Kennedy, 1917 ("Lower Truckee River, Pyramid Lake, Carlin, Golconda, Winnemucca, Lovelock").
- 58. Enallagma civile (Hagen), "Common Bluet"—Clark County (Corn Creek, Las Vegas, Stump Springs.) Previous records: No specific designations; Muttkowski, 1910 ("Transition to Tropics: North America, south of 45° latitude, West Indies").
- 59. Enallagma prævarum (Hagen), "Western Bluet"—Clark County (Rio Colorado, Stump Springs). Previous records: No specific designations; Muttkowski, 1910 ("Lower Austral: Kansas and Louisiana, west to California, Mexico"); Essig, 1926 ("California, Nevada, Arizona, New Mexico").
- 60. Enallagma anna Williamson, "Ana Bluet"—Elko County (Elko, Mountain City); Pershing County (Rye Patch Reservoir); Washoe County (Truckee Meadows, Sparks Canon). Previous records: Kennedy, 1917 ("Reno, Golconda").
- 61. Ischnura denticollis (Burmeister), the "Little Forktail"—
 Elko County (Carlin, Elko); Humboldt County (Mouth of
 Little Humboldt River, Winnemucca); Lander County (Battle Mountain); Washoe County (Truckee Meadows, Wadsworth). Previous records: Kennedy, 1917 ("Golconda,
 Lovelock").
- 62. Ischnura perparva Selys, the "Arva Forktail"—Churchill County (Carson Sink); Elko County (Deep Creek, Gold

- Creek, Mountain City, North Fork, Owyhee, Whiterock); Humboldt County (Golconda, Valmy, Winnemucca); Pershing County (Rye Patch Reservoir); Washoe County (Truckee Meadows, Verdi, Wadsworth). Previous records: Mutt-kowski, 1910 ("Upper and Lower Sonoran: Rockies, British Columbia and Montana to California and Texas"); Kennedy, 1917 ("Reno, Carlin, Golconda").
- 63. Ischnura cervula Selys, the "Ula Forktail"—Eureka County (Beowawe); Humboldt County (Mouth of Little Humboldt River, Winnemucca); Pershing County (Lovelock, Oreana, Rye Patch Reservoir); Washoe County (Truckee Meadows). Previous records: Kennedy, 1917 ("Reno, Lower Truckee River, Pyramid Lake, Carlin, Golconda").

The following species have not yet been found within the borders of the state but will doubtless be found in the future because they occur in similar adjacent areas: Gomphoides obscura (Rambur), Cordulegaster diadema Selys, Somatochlora semicircularis (Selys), Pseudoleon superbus (Hagen), Libellula luctuosa Burmeister, Libellula comanche Calvert, Plathemis lydia (Drury), Sympetrum obtrusum (Hagen), Dythemis velox Hagen, Brechmorhoga mendax (Hagen), Agrion maculatum Beauvais, Lestes disjunctus Selys, Hyponeura lugens (Hagen), Argia mæsta (Hagen), and Enallagma cyathigerum Charpentier.

BIBLIOGRAPHIC REFERENCES

- Brown, C. J. D., 1934. A Preliminary List of Utah Odonata. Occas. Papers Mus. Zool., Univ. Mich., No. 291.
- Essig, E. O., 1926. Insects of Western North America. The Macmillan Company, pp. 141-150.
- Kennedy, C. H., 1917. Notes on the Life History and Ecology of the Dragonflies (Odonata) of Central California and Nevada. Proc. U. S. N. M., 52:483-635.
- La Rivers, I., 1938. An Annotated List of the Libelluloidea (Odonata) of Southern Nevada. Jour. Ent. & Zool. No. 4/30:73-85.
- Muttkowski, R. A., 1910. Catalogue of the Odonata of North America. Bul. Pub. Mus. City of Milwaukee, 1:1-207.
- Needham, J. G., and Heywood, H. B., 1929. Handbook of the Dragonflies of North America. Charles C. Thomas, Springfield, Ill., pp. viii+378.
- Walker, E. M., 1912. North American Dragonflies of the Genus *Æschna*. Univ. of Toronto Studies, Biol. Series No. 11.
 1925. North American Dragonflies of the Genus *Somatochlora*. Univ. of Toronto Studies, Biol. Series.



Showing the points at which the author has made collections of dragonflies. The unnamed counties are Ormsby, in which Locality 8 lies, and Storey, designated by Locality 9. The long stream heading in Elko County and winding westward across the state to the Pershing-Churchill boundary is Humboldt River,

the longest stream in Nevada. The Owyhee River, whose source is near that of the Humboldt, flows northwest into Puget Sound. Two other large streams are the Truckee, entering Nevada from the west and depositing its waters in Pyramid and adjacent Winnemucca lakes (Washoe County), and the Walker emptying into Walker Lake in Mineral County. Forming the state's extreme southeast boundary, is the great Rio Colorado, the largest stream touching Nevada. Following is an explanatory list of the collecting localities: (1) Reno (Truckee Meadows), (2) Peavine (Cody Basin, Dry Lake), (3) Derby, (4) Verdi, (5) Steamboat Springs, (6) Franktown (Washoe Valley, Washoe Lake), (7) Wadsworth, (8) Carson City, (9) Virginia City, (10) Fernley, (11) Gardnerville, (12) Topaz Lake, (13) Smith Valley, (14) Yerington, (15) Schurz, (16) Fallon, (17) Lovelock, (18) Oreana, (19) Humboldt, (20) Imlay, (21) Mill City, (22) Winnemucca, (23) Mouth of Little Humboldt River, (24) Paradise, (25) Golconda, (26) Valmy, (27) Battle Mountain, (28) Dunphy, (29) Beowawe, (30) Palisade, (31) Carlin, (32) Elko, (33) Deeth, (34) Midas, (35) Tuscarora, (36) North Fork, (37) Deep Creek, (38) Whiterock, (39) Owyhee, (40) Mountain City, (41) Gold Creek, (42) Jarbridge, (43) Duck Creek, (44) Timber Creek, (45) Ely, (46) Lehman Caves, (47) Pony Spring, (48) Panaca, (49) Pahranagat Valley (Hiko), (50) Caliente, (51) Overton, (52) Lee Canon, (53) Harris Spring, (54) Las Vegas, (55) Boulder City (Boulder Lake), (56) Stump Springs, (57) Searchlight, (58) Beatty, (59) Fish Lake Valley, (60) Carson Sink, (61) Pyramid Lake, (62) Rye Patch Reservoir, (63) Quartz Spring.

EDWARD PAYSON VAN DUZEE

It is with deepest regret that we announce the death of Mr. Edward Payson Van Duzee at the age of 79 years. Born in New York City on April 6, 1861, he died on June 2, 1940, at Alameda, California, after a brief illness.

As a fitting memorial to one who served so long and so faithfully, the Publication Committee of the Pan-Pacific Entomologist dedicates the October number of the journal to Mr. Van Duzee, one of the founders and editor during the first fourteen years of its existence. The October number will contain a full account of the life and work of Mr. Van Duzee.—R. L. Usinger.